IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants	:	Gentaro Okayasu, et al.
Serial No.	:	09/581,689
For	:	DEVICE CONTROL APPARATUS AND METHOD
Filed	:	June 19, 2001
Examiner	:	Saltarell, Dominic D.
Art Unit	:	2623
Confirmation No.	:	9687

745 Fifth Avenue,
New York, NY 10151

FIRST CLASS MAIL CERTIFICATE

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Thomas F. Presson, Reg. No. 41,442
Name of Applicant, Assignee or Registered Representative

Signature

March 28, 2007
Date of Signature

APPEAL BRIEF OF APPELLANTS

Mail Stop Appeal Brief-Patents
Commissioner for Patents, P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This is an Appeal from the Final Rejection by the Examiner dated June 30, 2006, which issued in the above-identified application, finally rejecting claims 23-143; and from the Pre-Appeal Brief Conference decision dated February 28, 2007, confirming the rejections. A Notice of Appeal was filed on December 27, 2006. This Brief is submitted in accordance with 37

C.F.R. § 41.37. Enclosed is a check in the amount of $500.00 as payment of the Appeal Brief fee under 37 C.F.R. § 41.20.

REAL PARTY IN INTEREST

The real party in interest is Sony Corporation, a Japanese corporation with offices at 1-7-1 Konan, Minato-ku, Tokyo 108-0075, Japan to which appellants have assigned all interest in, to and under this application, by virtue of an assignment recorded on September 25, 2000 at Reel 011141, Frame 0146 of the assignment records of the Patent and Trademark Office.

RELATED APPEALS AND INTERFERENCES

The undersigned does not believe that there is any appeal or interference that will directly affect, be directly affected by or have a bearing on the Board's decision in the pending appeal.

REQUEST FOR AN ORAL HEARING

At this time appellants reserve the right to timely request to an oral hearing in accordance with 37 C.F.R. 41.47(b), and any requisite fee therefor may be charged or overpayment credited to Deposit Account No. 50-0320.

STATUS OF THE CLAIMS

Claims 23, 31, 39, 45, 51, 57, 65, 73, 78, 83, 89, 90, 97, 103, 109, 114, 119, 124, 129 and 136 stand rejected under 35 U.S.C. § 112, first paragraph.

Claims 23-25, 28, 29, 31-33, 36, 37, 57, 58, 60-63, 65, 66, 68-71, 73, 74, 76-79, 81-86. 89-93, 96, and 119-143 stand rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent 5,913,227 to Raz et al. (hereinafter, merely "Raz").

Claims 26, 27, 34, 35, 39-43, 45-48, and 51-54 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Raz in view of U.S. Patent 6,430,592 to Davison (hereinafter, merely "Davidson").

Claims 30, 38, 64, 72, 87, 88, 94, and 95 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Raz in view of U.S. Patent 5,528,282 to Voeten et al. hereinafter, merely "Voeten").

Claims 44, 50, and 56 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Raz in view of Davison and further in view of Voeten.

Claims 49 and 55 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over over Raz in view of Davison and further in view of U.S. Patent 5,301,324 to Dewey et al. (hereinafter, merely "Dewey").

Claims 59 and 67 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Raz.

Claims 75 and 80 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Raz in view of U.S. Patent 6,278,717 to Arsenault et al. (hereinafter, merely "Arsenault").

Claims 97, 98, 102-104, and 108-118 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Raz in view of U.S. Patent 5,935,206 to Dixon et al. (hereinafter, merely "Dixon").

Claims 99-101 and 105-107 stand rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Raz in view of Dixon and further in view of Dewey.

Rejected claims 23-143 are set forth in the Appendix attached hereto. Appellants are appealing the Final Rejection of claims 23-143, which constitute all of the currently pending claims in this application. The claims do not stand or fall together.

STATUS OF THE AMENDMENTS

Appellants understand that all the submitted Amendments have been entered.

SUMMARY OF THE CLAIMED SUBJECT MATTER

The citations to Figures and/or Specification locations are provided immediately following the elements of the independent claims, which are summarized below. Such citations, however, are provided merely as examples and are not intended to limit the interpretation of the claims or to evidence or create any estoppel. Support for each of these claims can be found throughout the specification as originally filed.

Claims 23, 31, 39, 45, 51, 57, 65, 73, 78, 83, 90, 97, 103, 109, 114, 119, 124, 129 and 136 are independent.

Independent claim 23 is directed to a control apparatus for controlling the state of use of a plurality of control targets 30, 40, the apparatus comprising upper control terminal means 11-13 for issuing a first control command instructing reserved use of a control target from amongst the plurality of control targets 30, 40, and control target allocation control means 16 for inhibiting upper control terminal means except for the upper control terminal means which issued the control command, of a plurality of upper control terminal means 11-13, from using the control target of the reserved use instructed by the first control command, on the basis of the first control command from the upper control terminal means, wherein the upper control terminal

means 11-13 are connected through a network to controllers 17-19 which are directly connected to the plurality of control targets 30, 40, the control target allocation control means being located in the controllers. (Page 4, line 14 - page 8, line 11; Fig. 1)

Independent claim 31 is directed to a control method for controlling the state of use of a plurality of control targets 30, 40, the method comprising a first step of receiving a first control command from upper control terminal means 11-13 instructing reserved use of a control target from amongst the plurality of control targets 30, 40, and a second step of inhibiting upper control terminal means except for the upper control terminal means which issued the control command, of a plurality of upper control terminal means 11-13, from using the control target of the reserved use instructed by the first control command, on the basis of the first control command, wherein the upper control terminal means 11-13 are connected through a network to controllers 17-19 which are directly connected to the plurality of control targets 30, 40, the controllers performing the control method. (Page 8, line 12 - page 14, line 13; Figs. 2, 3 & 4)

Independent claim 39 is directed to a control apparatus for controlling the state of use of a plurality of control targets 30, 40, the apparatus comprising upper control terminal means 11 for issuing a first control command instructing permission of occupancy and use of a control target from amongst the plurality of control targets, and control target allocation control means 71 for inhibiting upper control terminal means except for the upper control terminal means 11, of a plurality of upper control terminal means 11, 12, from using the control target instructed by the first control command, on the basis of priority added to the first control command from the upper control terminal means, wherein the upper control terminal means 11, 12 are connected through a network to the control target allocation control means 71 which are directly connected to the plurality of control targets. (Page 28, line 31 - page 30, line 9; Fig. 12)

Independent claim 45 is directed to a control apparatus for controlling the state of use of a plurality of control targets 30, 40, the apparatus comprising a plurality of upper control terminal means 11, 12, each upper control terminal being capable of issuing a first control command requesting permission of occupancy and use of a control target from amongst the plurality of control targets, and allocation control means 14 for issuing, to one of the plurality of upper control terminal means, a notification of permission indicating the permission of use with respect to the control target indicated by the first control command, on the basis of the priority given to the first control command from the plurality of upper control terminal means 11, 12, wherein the upper control terminal means are connected through a network to the allocation control means 14 which are directly connected to the plurality of control targets. (Page 28, line 31 - page 30, line 9; Fig. 12)

Independent claim 51 is directed to a control method for controlling the state of use of a plurality of control targets 30, 40, the method comprising a first step of receiving a first control command from one of a plurality of upper control terminal means 11-13 requesting permission of occupancy and use of a control target from amongst the plurality of control targets 30, 40, and a second step of issuing, to one of the plurality of upper control terminal means 11-13, a notification of permission indicating the permission of use with respect to the control target indicated by the first control command, on the basis of the priority given to the first control command, wherein the upper control terminal means 11-13 are connected through a network to controllers 17-19 which are directly connected to the plurality of control targets 30, 40, the controllers performing the control method. (Page 30, line 10 - page 39, line 16; Figs. 13, 14)

Independent claim 57 is directed to a control apparatus for controlling the state of use of a plurality of control targets 30, 40, the apparatus comprising a plurality of upper control

terminal means 11-13, each upper control terminal being capable of issuing a first control command requesting permission of use of a control target from amongst the plurality of control targets 30, 40, and management means 14 for issuing identification information provided for each of the control targets to the one upper control terminal means which issued the first control command, on the basis of the first control command including at least the control target, wherein the upper control terminal means 11-13 are connected through a network to the management means 14 which are directly connected to the plurality of control targets. (Page 28, line 31 - page 30, line 9; Fig. 12)

Independent claim 65 is directed to a control method for controlling the state of use of a plurality of control targets 30, 40, the method comprising a first step of receiving a first control command requesting permission of use of a control target from amongst the plurality of control targets, outputted from one of a plurality of upper control terminal means 11-13, and a second step of issuing identification information 351-353 provided for each of the control targets to the one upper control terminal means which issued the first control command, on the basis of the first control command including at least the control target, wherein the upper control terminal means are connected through a network to controllers 14, 16, 17 which are directly connected to the plurality of control targets 30, 40, the controllers performing the control method. (Page 56, line 1 - page 65, line 4; Figs. 24-27)

Independent claim 73 is directed to a control apparatus for controlling a plurality of control targets 30, 40, the apparatus comprising a plurality of upper control terminal means 11-13, each capable of issuing a first control command requesting permission of use of a control target from amongst the plurality of control targets, identification information management means 72a for issuing identification information provided for each of the control targets to the

one upper control terminal means which issued the first control command, on the basis of the first control command including at least the control target, connection information management means for managing connection information of the control target, and control information processing means 72b for, when a second control command indicating connection of the control target to which the identification information issued by the identification information management means is appended is received from the upper control terminal means, issuing a third control command indicating a connection instruction to the control target indicated by the second control command on the basis of the management information of the connection information management means 72b, wherein the upper control terminal means are connected through a network to controllers which are directly connected to the plurality of control targets 30, 40, the controllers including the identification information management means 72, connection information management means 72a, and control information processing means 72b. (Page 72, line 24 - page 73, line 20; Fig. 35)

Independent claim 78 is directed to a control method for controlling a plurality of control targets 30, 40, the method comprising a first step of receiving a first control command requesting permission of use of a control target from amongst the plurality of control targets 30, 40, outputted from one of a plurality of upper control terminal means 11-13, a second step of issuing identification information provided for each of the control targets 30, 40 to the one upper control terminal means which issued the first control command, on the basis of the first control command, and a third step of, when a second control command indicating connection of the control target to which the identification information 72a is appended is received, issuing a third control command indicating a connection instruction to the control target indicated by the second control command with reference to a connection management information table 72b indicating

connection information of the control target, wherein the upper control terminal means are connected through a network to controllers which are directly connected to the plurality of control targets 30, 40, the controllers performing the control method. (Page 73, line 1 - page 76, line 31; Fig. 36, 38, & 39)

Independent claim 83 is directed to a control apparatus for controlling a plurality of control targets 30, 40, the apparatus comprising a plurality of upper control terminal means 11-13, each capable of issuing a first control command requesting permission of use of a control target from amongst the plurality of control targets 30, 40, management means having a control target management table including at least the control target and first identification information corresponding to each of the control targets 30, 40, for issuing a second control command requesting permission of use of the control target including the first identification information from the management table on the basis of the first control command including the control target, and control target control means for notifying of a result with respect to the permission of use of the control target on the basis of the second control command, the management means setting a use permission flag with respect to the control target included in the management table on the basis of the result from the control target control means, wherein the upper control terminal means are connected through a network to controllers which are directly connected to the plurality of control targets 30, 40, the controllers including the management means and control target control means. (Page 73, line 20 - page 76, line 31; Fig. 37)

Independent claim 90 is directed to a control method for controlling a plurality of control targets 30, 40, the method comprising a first step of receiving a first control command from upper control terminal means requesting permission of use of a control target from amongst the plurality of control targets 30, 40, a second step of issuing a second control command

requesting permission of use of the control target from a control target management table including at least the control target and first identification information corresponding to the control target, a third step of receiving a result of permission of use of the control target with respect to the second control command, and a fourth step of setting a use permission flag with respect to the control target included in the management table on the basis of the result of the permission of use, wherein the upper control terminal means are connected through a network to controllers which are directly connected to the plurality of control targets 30, 40, the controllers performing the steps of the control method. (Page 72, line 24 - page 76, line 31; Figs. 36, 38 & 39)

Independent claim 97 is directed to a control apparatus for controlling a plurality of control targets 30, 40, the apparatus comprising a plurality of upper control terminal means 11-13, each capable of issuing a first control command requesting permission of use of a control target from amongst the plurality of control targets 30, 40, and management means to which the first control command including the file name of a file stored in one of the control targets 30, 40 is inputted, for finding control targets 30, 40 to which the file is to be outputted from the file name and selecting, from the control targets 30, 40 that are found, a second control target other than the control target, wherein the upper control terminal means are connected through a network to the management means which are directly connected to the plurality of control targets 30, 40. (Page 72, line 24 - page 76, line 31; Figs. 35 & 37)

Independent claim 103 is directed to a control method for controlling a plurality of control targets 30, 40, the method comprising a first step of inputting a first control command from one of a plurality of upper control terminal means 11-13, requesting permission of use of a control target from amongst the plurality of control targets 30, 40, a second step of finding

control targets 30, 40 to which a file is to be outputted from a file name included in the first control command, and a third step of selecting, from the control targets 30, 40 that are found at the second step, a second control target other than the control target, wherein the upper control terminal means are connected through a network to controllers which are directly connected to the plurality of control targets 30, 40, the controllers performing the steps of the control method. (Page 72, line 24 - page 76, line 31; Figs. 36, 38 & 39)

Independent claim 109 is directed to a control apparatus for controlling a plurality of control targets 30, 40, the apparatus comprising a plurality of upper control terminal means 11-13, each capable of issuing a first control command requesting permission of use of a control target from amongst the plurality of control targets 30, 40, and management means to which the first control command including the file name of a file stored in one of the control targets 30, 40 is inputted, for finding the control targets 30, 40 to which the file is to be outputted from the file name, and selecting the control target for which the upper control terminal means having issued the first control command issued a reserved use command with respect to the control target, of the control targets 30, 40 that are found, wherein the upper control terminal means are connected through a network to the management means which are directly connected to the plurality of control targets 30, 40. (Page 72, line 24 - page 76, line 31; Figs. 35 & 37)

Independent claim 114 is directed to a control method for controlling a plurality of control targets 30, 40, the method comprising a first step of inputting a first control command from one of a plurality of upper control terminal means 11-13, requesting permission of use of a control target from amongst the plurality of control targets 30, 40, a second step of finding the control targets 30, 40 to which a file is to be outputted from a file name included in the first control command, and a third step of selecting the control target for which the upper control

terminal means having issued the first control command issued a reserved use command with respect to the control target, of the control targets 30, 40 that are found at the second step, wherein the upper control terminal means are connected through a network to controllers which are directly connected to the plurality of control targets 30, 40, the controllers performing the steps of the control method. (Page 72, line 24 - page 76, line 31; Figs. 36, 38 & 39)

Independent claim 119 is directed to a control apparatus for controlling a plurality of control targets 30, 40, the apparatus comprising a plurality of upper control terminal means 11-13, each capable issuing a first control command requesting permission of use of a control target from amongst the plurality of control targets 30, 40, and management means for, when the first control command including the file name of a file stored in one of the control targets 30, 40 is inputted, finding the control targets 30, 40 to which the file is to be outputted from the file name and selecting the control target other than the control target in an error and warning state, of the control targets 30, 40 that are found, wherein the upper control terminal means are connected through a network to the management means which are directly connected to the plurality of control targets 30, 40. (Page 72, line 24 - page 76, line 31; Figs. 35 & 37)

Independent claim 124 is directed to a control method for controlling a plurality of control targets 30, 40, the method comprising a first step of inputting a first control command from one of a plurality of upper control terminal means 11-13, requesting permission of use of a control target from amongst the plurality of control targets 30, 40, a second step of finding the control targets 30, 40 to which a file is to be outputted from a file name included in the first control command, and a third step of selecting the control target other than the control target in an error and warning state, of the control targets 30, 40 that are found at the second step, wherein the upper control terminal means are connected through a network to controllers which are

directly connected to the plurality of control targets 30, 40, the controllers performing the steps of the control method. (Page 72, line 24 - page 76, line 31; Figs. 36, 38 & 39)

Independent claim 129 is directed to a control apparatus for controlling a plurality of control targets 30, 40, the apparatus comprising a plurality of upper control terminal means 11-13, each capable of issuing a first control command requesting permission of use of a control target from amongst the plurality of control targets 30, 40, and management means to which the first control command including the file name of a file stored in one of the control targets 30, 40 is inputted, for finding the control targets 30, 40 to which the file is to be outputted from the file name, and selecting the control target which is not in an error state and which is reserved by a reservation command issued by the upper control terminal means having issued the first control command or which is not reserved as a reservation command is not issued, and which is in a non-use state or which has low priority of permission of use, from the control targets 30, 40 that are found, wherein the upper control terminal means are connected through a network to the management means which are directly connected to the plurality of control targets 30, 40. (Page 72, line 24 - page 76, line 31; Figs. 35 & 37)

Independent claim 136 is directed to a control method for controlling a plurality of control targets 30, 40, the method comprising a first step of receiving a first control command from one of a plurality of upper control terminal means 11-13, requesting permission of use of a control target from amongst the plurality of control targets 30, 40, a second step of inputting the first control command including the file name of a file stored in one of the control targets 30, 40, and outputting the file from the file name, and a third step of selecting the control target which is not in an error state and which is reserved by a reservation command issued by the upper control terminal means having issued the first control command or which is not reserved as a reservation

command is not issued, and which is in a non-use state or which has low priority of permission of use, from the control targets 30, 40 that are found at the second step, wherein the upper control terminal means are connected through a network to controllers which are directly connected to the plurality of control targets 30, 40, the controllers performing the steps of the control method. (Page 72, line 24 - page 76, line 31; Figs. 36, 38 & 39)

GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL

Claims 23, 31, 39, 45, 51, 57, 65, 73, 78, 83, 89, 90, 97, 103, 109, 114, 119, 124, 129 and 136 were rejected under 35 U.S.C. § 112, first paragraph.

Claims 23-25, 28, 29, 31-33, 36, 37, 57, 58, 60-63, 65, 66, 68-71, 73, 74, 76-79, 81-86. 89-93, 96, and 119-143 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent 5,913,227 to Raz et al. (hereinafter, merely "Raz").

Claims 26, 27, 34, 35, 39-43, 45-48, and 51-54 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Raz in view of U.S. Patent 6,430,592 to Davison (hereinafter, merely "Davidson").

Claims 30, 38, 64, 72, 87, 88, 94, and 95 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Raz in view of U.S. Patent 5,528,282 to Voeten et al. hereinafter, merely "Voeten").

Claims 44, 50, and 56 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Raz in view of Davison and further in view of Voeten.

Claims 49 and 55 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Raz in view of Davison and further in view of U.S. Patent 5,301,324 to Dewey et al. (hereinafter, merely "Dewey").

Claims 59 and 67 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Raz.

Claims 75 and 80 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Raz in view of U.S. Patent 6,278,717 to Arsenault et al. (hereinafter, merely "Arsenault").

Claims 97, 98, 102-104, and 108-118 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Raz in view of U.S. Patent 5,935,206 to Dixon et al. (hereinafter, merely "Dixon").

Claims 99-101 and 105-107 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Raz in view of Dixon and further in view of Dewey.

ARGUMENTS

I. The §112 Rejections Should be Withdrawn Because the Cited Portions of the Specification Disclose Each and Every Element Recited in the Claims

Appellants respectfully traverse the 35 U.S.C. § 112, first paragraph rejections. Appellants submit that, as shown in Figure 1, a transmission broadcast system where application computers (upper control terminals 11-13) are connected through a local area network 15 to a hierarchy of controllers, device sub controllers 17, 18 and 19, which manage and control through direct connections the processing sections (control targets: reference numbers 31-34 and 41-44) of several AV servers 30, 40.

Appellants submit that, as shown in Figures 4 and 6, upper control terminal 11, 12, 13 issues a reservation command to the execution management task 71.

Therefore, Appellants respectfully request that the 35 U.S.C. §112, first paragraph rejections be withdrawn from consideration.

II. The §102 Rejections Should be Withdrawn Because the Cited References Do Not Disclose Each and Every Element Recited in the Claims

Claim 23 recites, *inter alia*:

> "A control apparatus for controlling the state of use of a plurality of control targets, the apparatus comprising:
>
> ...wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the control target allocation control means being located in the controllers." (emphasis added)

It is respectfully submitted that Raz fails to provide the disclosure of claim 23. On pages 5-6 of the Office Action, it cites column 5, lines 26-33 of Raz, which states, "...management module can be either centralized or distributed. If it is distributed, some communication mechanisms will be needed to distributed the table identifying ownership etc. to all hosts where it is can be then stored locally...the table could be updated whenever a host makes an open file request...part of the process of opening the file could also check ownership information that is stored in the centralized location."

Appellants respectfully submit that Raz fails to teach or suggest the features of claim 23. Specifically, Appellants submit that there is no teaching or suggestion of a control apparatus for controlling the state of use of a plurality of control targets wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the control target allocation control means being located in the controllers, recited in claim 23.

Indeed, Appellants submit that a distributed management module identifying ownership, etc. to hosts where it could be updated whenever a host makes an open file request as part of the process of opening the file and could also check ownership information that is stored

in the centralized location includes no suggestion of control terminal means connected through a network to controllers which are directly connected to said plurality of control targets and the control target allocation control means are located in the controllers.

Therefore, Appellants respectfully submit that claim 23 is patentable.

For reasons similar to those described above with regard to independent claim 23, independent claims 31, 39, 45, 51, 57, 65, 73, 78, 83, 89, 90, 97, 103, 109, 114, 119, 124, 129 and 136 are also believed to be patentable.

Therefore, Appellants submit that independent claims 23, 31, 39, 45, 51, 57, 65, 73, 78, 83, 89, 90, 97, 103, 109, 114, 119, 124, 129 and 136 are patentable.

Appellants respectfully assert than none of the cited references disclose the physical structure of the broadcast system shown in Figure 1 and recited in the present claims. Therefore, for at least this reason, Raz, Voeten, Davison, Dixon, Dewey, and Arsenault fail to anticipate or obviate the present invention and the rejected claims should now be allowed.

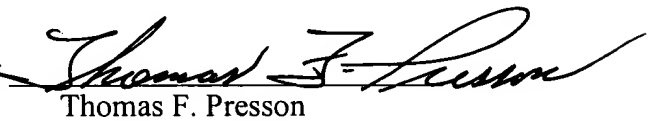
The other claims are each dependent from one of the independent claims discussed above and are therefore believed patentable for at least the above-identified reasons.

CONCLUSION

For the foregoing reasons, claims 23-143 are patentable. It is, therefore respectfully submitted that the rejection of claims 23-143 was in error. Appellants respectfully request a reversal of these rejections by this Honorable Board, with a prompt issuance of a Notice of Allowance, or such other relief that the Honorable Board deems just and fair.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP
Attorneys for Appellant

By 

Thomas F. Presson
Reg. No. 41,442
Tel (212) 588-0800
Fax (212) 588-0500

APPENDIX I

CLAIMS ON APPEAL

1-22. (Canceled)

23. (Previously Presented) A control apparatus for controlling the state of use of a plurality of control targets, the apparatus comprising:

upper control terminal means for issuing a first control command instructing reserved use of a control target from amongst said plurality of control targets; and

control target allocation control means for inhibiting upper control terminal means except for the upper control terminal means which issued the control command, of a plurality of upper control terminal means, from using the control target of the reserved use instructed by the first control command, on the basis of the first control command from the upper control terminal means;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the control target allocation control means being located in the controllers.

24. (Previously Presented) The control apparatus as claimed in claim 23, wherein even when a second control command instructing occupancy of the control target of the reserved use instructed by the first control command is received from the upper control terminal means except for the upper control terminal means which issued the first control command, the control target allocation control means inhibits the use by the upper control terminal means which issued the second control command.

25. (Previously Presented) The control apparatus as claimed in claim 24, wherein when the first control command is received from the upper control terminal means, the control target allocation control means registers information including the upper control terminal means which issued the first control command and the control target of the reserved use to a management information database of the control target, and when the second control command is received from the upper control command and the control target instructed by the second control command is coincident with the control target of the management information database, the control target allocation control means transmits a control command indicating failure of the second control command to the upper control terminal means which issued the second control command and thus inhibits the use by the upper control terminal means.

26. (Previously Presented) The control apparatus as claimed in claim 23, wherein when the first control command instructing reservation of the same control target is received from the plurality of upper control terminal means, the control target allocation control means inhibits the use by the upper control terminal means except for the upper control terminal means which issued the first control command of the highest priority, on the basis of priority added to the first control command.

27. (Previously Presented) The control apparatus as claimed in claim 26, wherein the control target allocation control means has a management information database for registering information including the terminal user of the upper control terminal means which issued the first control command, the control target of reserved use and the priority added to the first control command, and inhibits the use by the upper control terminal means except for the upper control terminal means which issued the first control command of the highest priority with reference to the management information database.

28. (Previously Presented) The control apparatus as claimed in claim 23, wherein the control target allocation control means inhibits the use of the control target added to the first control command by the upper control terminal means except for the upper control terminal means which issued the first control command, of the plurality of upper control terminal means, on the basis of reserved use of a group to which the control target added to the first control command belong.

29. (Previously Presented) The control apparatus as claimed in claim 28, wherein the control target allocation control means has a management information database for registering information including the user of the upper control terminal means which issued the first control command, the control target name instructed by the first control command and the group name to which the plurality of control targets belong, and

even when a second control command instructing occupancy of the plurality of control targets instructed by the first control command is received from the upper control terminal means except for the upper control terminal means which issued the first control command with reference to the management information database, the control target allocation control means transmits a control command indicating failure of the second control command to the upper control terminal means which issued the second control command and thus inhibits the use by the upper control terminal means except for the upper control terminal means which issued the first control command.

30. (Previously Presented) The control apparatus as claimed in claim 23, wherein the control target includes each recording medium which is non-linearly accessible to each input/output processing means constituting a video server, and each input channel to which data including a plurality of video and/or audio data inputted from outside or outputted from the video server are inputted and each output channel for outputting the data to be outputted to outside or to be outputted to the video server, the input channel and output channel constituting switching means.

31. (Previously Presented) A control method for controlling the state of use of a plurality of control targets, the method comprising:

a first step of receiving a first control command from upper control terminal means instructing reserved use of a control target from amongst said plurality of control targets ; and

a second step of inhibiting upper control terminal means except for the upper control terminal means which issued the control command, of a plurality of upper control terminal means, from using the control target of the reserved use instructed by the first control command, on the basis of the first control command;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the controllers performing said control method.

32. (Previously Presented) The control method as claimed in claim 31, wherein at the second step, even when a second control command instructing occupancy of the control target of the reserved use instructed by the first control command is received from the upper control terminal means except for the upper control terminal means which issued the first control command, the use by the upper control terminal means which issued the second control command is inhibited.

33. (Previously Presented) The control method as claimed in claim 31, wherein at the second step, when the first control command is received from the upper control terminal means, information including the upper control terminal means which issued the first control command and the control target of the reserved use is registered to a management information database of the control target, and when the second control command is received from the upper control command and the control target instructed by the second control command is coincident with the control target of the management information database, a control command indicating failure of the second control command is transmitted to the upper control terminal means which issued the second control command, thus inhibiting the use by the upper control terminal means.

34. (Previously Presented) The control method as claimed in claim 31, wherein at the second step, when the first control command instructing reservation of the same control target is received from the plurality of upper control terminal means, the use by the upper control terminal means except for the upper control terminal means which issued the first control command of the highest priority is inhibited on the basis of priority added to the first control command.

35. (Previously Presented) The control method as claimed in claim 34, wherein the second step has a management information database for registering information including the terminal user of the upper control terminal means which issued the first control command, the control target of reserved use and the priority added to the first control command, and inhibits the use by the upper control terminal means except for the upper control terminal means which issued the first control command of the highest priority with reference to the management information database.

36. (Previously Presented) The control method as claimed in claim, 31, wherein at the second step, the use of the control target added to the first control command by the upper control terminal means except for the upper control terminal means which issued the first control command, of the plurality of upper control terminal means, is inhibited on the basis of reserved use of a group to which the control target added to the first control command belong.

37. (Previously Presented) The control method as claimed in claim 36, wherein a management information database is provided for registering information including the user of the upper control terminal means which issued the first control command, the control

target name instructed by the first control command and the group name to which the plurality of control targets belong, and

even when a second control command instructing occupancy of the plurality of control targets instructed by the first control command is received from the upper control terminal means except for the upper control terminal means which issued the first control command with reference to the management information database, a control command indicating failure of the second control command is transmitted to the upper control terminal means which issued the second control command, thus inhibiting the use by the upper control terminal means except for the upper control terminal means which issued the first control command.

38. (Previously Presented) The control method as claimed in claim 31, wherein the control target includes each recording medium which is non-linearly accessible to each input/output processing means constituting a video server, and each input channel to which data including a plurality of video and/or audio data inputted from outside or outputted from the video server are inputted and each output channel for outputting the data to be outputted to outside or to be outputted to the video server, the input channel and output channel constituting switching means.

39. (Previously Presented) A control apparatus for controlling the state of use of a plurality of control targets, the apparatus comprising:

upper control terminal means for issuing a first control command instructing permission of occupancy and use of a control target from amongst said plurality of control targets; and

control target allocation control means for inhibiting upper control terminal means except for the upper control terminal means, of a plurality of upper control terminal means, from using the control target instructed by the first control command, on the basis of priority added to the first control command from the upper control terminal means;

wherein the upper control terminal means are connected through a network to the control target allocation control means which are directly connected to said plurality of control targets.

40. (Previously Presented) The control apparatus as claimed in claim 39, wherein when the first control command instructing permission of occupancy and use of the same control target is received from the plurality of upper control terminal means, the control target allocation control means inhibits the occupancy and use of the control target by the upper control terminal means except for the upper control terminal means which issued the first control command of the highest priority on the basis of the priority.

41. (Previously Presented) The control apparatus as claimed in claim 40, wherein the control target allocation control means has an occupancy management information database constituted by the control target for which a notification of permission of occupancy is issued, the upper control terminal means which issued the first control command and the priority added to the first control command, and when the first control command instructing permission of occupancy of the same control target as the control target registered to the occupancy management information database is received from the upper control terminal means except for the upper control terminal means registered to the database, of the plurality of upper control

terminal means, the control target allocation control means compares the priority added to the first control command and inhibits the upper control terminal means except for the upper control terminal means which issued the first control command of the highest priority, from using the control target.

42. (Previously Presented) The control apparatus as claimed in claim 41, wherein the control target allocation control means compares the priority on the basis of the database, and when the priority registered to the database is lower than the priority added to the upper control terminal means which issued the first control command, the control target allocation control means issues a control command indicating cancel of the occupancy and use to the upper control terminal means having the priority registered to the database.

43. (Previously Presented) The control apparatus as claimed in claim 41, wherein when a second control command instructing permission of occupancy and use of the plurality of control targets is received from the upper control terminal means, the control target allocation control means compares the lowest priority of the priorities registered to the database of the plurality of control targets instructed by the second control command, of the plurality of control targets registered to the database, with the priority added to the second control command, and inhibits the upper control terminal means except for the upper control terminal means which issued the control command of the higher priority, from using the control targets.

44. (Previously Presented) The control apparatus as claimed in claim 39, wherein the control target includes each recording medium which is non-linearly accessible to each input/output processing means constituting a video server, and each input channel to which data including a plurality of video and/or audio data inputted from outside or outputted from the video server are inputted and each output channel for outputting the data to be outputted to outside or to be outputted to the video server, the input channel and output channel constituting switching means.

45. (Previously Presented) A control apparatus for controlling the state of use of a plurality of control targets, the apparatus comprising:

a plurality of upper control terminal means, each upper control terminal being capable of issuing a first control command requesting permission of occupancy and use of a control target from amongst said plurality of control targets; and

allocation control means for issuing, to one of the plurality of upper control terminal means, a notification of permission indicating the permission of use with respect to the control target indicated by the first control command, on the basis of the priority given to the first control command from the plurality of upper control terminal means;

wherein the upper control terminal means are connected through a network to the allocation control means which are directly connected to said plurality of control targets.

46. (Previously Presented) The control apparatus as claimed in claim 45, wherein when the first control command requesting the permission of use with respect to the same control target is received from the plurality of upper control terminal means, the allocation control means issues the notification of permission to the upper control terminal means which issued the first control command of the highest priority on the basis of the priority.

47. (Previously Presented) The control apparatus as claimed in claim 46, wherein the allocation control means includes an occupancy management information database including the control target for which the notification of permission is issued, the upper control terminal means which issued the first control command, and the priority given to the first control command, and when a second control command requesting permission of use with respect to the control target registered to the database is received from the upper control terminal means other than the upper control terminal means registered to the occupancy management information database, the allocation control means compares the priority given to the first control command issued by the upper control terminal means with respect to the control target registered to the database and the priority given to the second control command, and issues the notification of permission to the upper control terminal means which issued the first or second control command of the higher priority.

48. (Previously Presented) The control apparatus as claimed in claim 47, wherein the allocation control means compares the priority, and issues a notification of cancel for canceling the permission of occupancy and use to the control terminal means which issued the first control command when the priority given to the first control command is lower than the priority given to the second control command.

49. (Previously Presented) The control apparatus as claimed in claim 46, wherein when a third control command requesting permission of occupancy and use with respect to the plurality of control targets is received from the upper control terminal means, the allocation control means compares the lowest priority of the plurality of control targets registered to the database and the priority given to the third control command, and issues the notification of permission to the upper control terminal means which issued the third control command when the priority given to the third control command is higher.

50. (Previously Presented) The control apparatus as claimed in claim 47, wherein the control targets include a video server including a plurality of input/output processing means and a non-linearly accessible recording medium so that one input/output processing means can access the recording medium in an allocated time slot, and a switcher including a plurality of input channels to which a plurality of data including video and/or audio data inputted from outside or outputted from the video server are inputted and a plurality of output channels for outputting the data to be outputted to outside or to the video server.

51. (Previously Presented) A control method for controlling the state of use of a plurality of control targets, the method comprising:

a first step of receiving a first control command from one of a plurality of upper control terminal means requesting permission of occupancy and use of a control target from amongst said plurality of control targets; and

a second step of issuing, to one of the plurality of upper control terminal means, a notification of permission indicating the permission of use with respect to the control target indicated by the first control command, on the basis of the priority given to the first control command;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the controllers performing said control method.

52. (Previously Presented) The control method as claimed in claim 51, wherein at the second step, when the first control command requesting the permission of use with respect to the same control target is received from the plurality of upper control terminal means, the notification of permission is issued to the upper control terminal means which issued the first control command of the highest priority on the basis of the priority.

53. (Previously Presented) The control method as claimed in claim 52, wherein at the second step, an occupancy management information database is provided including the control target for which the notification of permission is issued, the upper control terminal means which issued the first control command, and the priority given to the first control command, and when a second control command requesting permission of use with respect to the control target registered to the database is received from the upper control terminal means other than the upper control terminal means registered to the occupancy management information database, the priority given to the first control command issued by the upper control terminal means with respect to the control target registered to the database and the priority given to the second control command are compared and the notification of permission is issued to the upper control terminal means which issued the first or second control command of the higher priority.

54. (Previously Presented) The control method as claimed in claim 53, wherein at the second step, the priority is compared, and a notification of cancel for canceling the permission of occupancy and use is issued to the control terminal means which issued the first control command when the priority given to the first control command is lower than the priority given to the second control command.

55. (Previously Presented) The control method as claimed in claim 53, wherein at the second step, when a third control command requesting permission of occupancy and use with respect to the plurality of control targets is received from the upper control terminal means, the lowest priority of the plurality of control targets registered to the database and the priority given to the third control command are compared, and the notification of permission is issued to the upper control terminal means which issued the third control command when the priority given to the third control command is higher.

56. (Previously Presented) The control method as claimed in claim 51, wherein the control targets include a video server including a plurality of input/output processing means and a non-linearly accessible recording medium so that one input/output processing means can access the recording medium in an allocated time slot, and a switcher including a plurality of input channels to which a plurality of data including video and/or audio data inputted from outside or outputted from the video server are inputted and a plurality of output channels for outputting the data to be outputted to outside or to the video server.

57. (Previously Presented) A control apparatus for controlling the state of use of a plurality of control targets, the apparatus comprising:

a plurality of upper control terminal means, each upper control terminal being capable of issuing a first control command requesting permission of use of a control target from amongst said plurality of control targets; and

management means for issuing identification information provided for each of the control targets to the one upper control terminal means which issued the first control command, on the basis of the first control command including at least the control target;

wherein the upper control terminal means are connected through a network to the management means which are directly connected to said plurality of control targets.

58. (Previously Presented) The control apparatus as claimed in claim 57, wherein the upper control terminal means appends the identification information issued from the management means, and issues a second control command, which is a command for controlling the control target, to the management means.

59. (Previously Presented) The control apparatus as claimed in claim 58, wherein the first control command further includes the file name of a file including video and/or audio data to be inputted from and/or outputted to the control target, and the management means issues to the control target a third control command for causing the control target to control the file on the basis of the second control command.

60. (Previously Presented) The control apparatus as claimed in claim 57, wherein the management means has at least an identification information management database including the control target and corresponding identification information, and second identification information provided for another one of the control targets and different from the identification information corresponding to an entry of identification information of the database with respect to the control target appended to the first control command.

61. (Previously Presented) The control apparatus as claimed in claim 60, wherein the identification information is further registered to the identification information management database and the file name appended to the first control command is registered thereto.

62. (Previously Presented) The control apparatus as claimed in claim 60, wherein when the second identification information is already registered to the entry of identification information of the database with respect to the control target appended to the first control command, the management means issues error information inhibiting the permission of use to the upper control terminal means which issued the first control command.

63. (Previously Presented) The control apparatus as claimed in claim 62, wherein when a fourth control command indicating a command for deleting identification information from the upper control terminal means is received, the management means deletes the identification information corresponding to the first control command registered to the database.

64. (Previously Presented) The control apparatus as claimed in claim 57, wherein the control targets are each input/output processing means of a video server adapted for

recording data to and reproducing data from a non-linearly accessible recording medium, and each input section and output section each of switchers to which the data inputted from outside or outputted from each input/output processing means of the video server is inputted or from which the data is outputted to outside or inputted to each input/output processing means of the video server.

65. (Previously Presented) A control method for controlling the state of use of a plurality of control targets, the method comprising:

a first step of receiving a first control command requesting permission of use of a control target from amongst said plurality of control targets, outputted from one of a plurality of upper control terminal means; and

a second step of issuing identification information provided for each of the control targets to the one upper control terminal means which issued the first control command, on the basis of the first control command including at least the control target;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the controllers performing the control method.

66. (Previously Presented) The control method as claimed in claim 65, further comprising a third step of receiving a second control command, which is a command for controlling the control target, issued from the one upper control terminal means and having the identification information appended thereto.

67. (Previously Presented) The control method as claimed in claim 65, wherein the first control command includes the file name of a file including video and/or audio data to be inputted from and/or outputted to the control target, and at the third step, a third control command for causing the control target to control the file is issued on the basis of the second control command.

68. (Previously Presented) The control method as claimed in claim 65, wherein at the first step, the identification information other than the identification information provided for another one of the control targets is registered to an entry of control target appended to the first control command, from an identification information management table including at least the control target and the identification information, and the registered identification information is issued to the one upper control terminal means which issued the first control command.

69. (Previously Presented) The control method as claimed in claim 68, wherein the identification information is further registered to the identification information management table and the file name appended to the first control command is registered thereto.

70. (Previously Presented) The control method as claimed in claim 68, wherein at the first step, when the identification information is already registered to the entry of identification information of the control target of the database with respect to the control target appended to the first control command, error information inhibiting the permission of use is issued to the upper control terminal means which issued the first control command.

71. (Previously Presented) The control method as claimed in claim 70, wherein at the first step, when a fourth control command indicating a command for deleting the identification information from the upper control terminal means is received, the identification information with respect to the first control command registered to the database is deleted.

72. (Previously Presented) The control method as claimed in claim 65, wherein the control targets are each input/output processing means of a video server adapted for recording data to and reproducing data from a non-linearly accessible recording medium, and each input section and output section each of switchers to which the data inputted from outside or outputted from each input/output processing means of the video server is inputted or from which the data is outputted to outside or outputted to each input/output processing means of the video server.

73. (Previously Presented) A control apparatus for controlling a plurality of control targets, the apparatus comprising:

a plurality of upper control terminal means, each capable of issuing a first control command requesting permission of use of a control target from amongst said plurality of control targets;

identification information management means for issuing identification information provided for each of the control targets to the one upper control terminal means which issued the first control command, on the basis of the first control command including at least the control target;

connection information management means for managing connection information of the control target; and

control information processing means for, when a second control command indicating connection of the control target to which the identification information issued by the identification information management means is appended is received from the upper control terminal means, issuing a third control command indicating a connection instruction to the control target indicated by the second control command on the basis of the management information of the connection information management means;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the controllers including the identification information management means, connection information management means, and control information processing means.

74. (Previously Presented) The control apparatus as claimed in claim 73, wherein the control target includes a switcher having a plurality of input sections and a plurality of output sections, and the second control command includes first identification information issued by the upper control terminal means with respect to other control targets connected to each input section of the switcher and second identification information issued by the upper control terminal means with respect to the output sections of the switcher.

75. (Previously Presented) The control apparatus as claimed in claim 74, wherein the connection information management means has a connection point table including information related to each input section of the switcher, the control target connected to each

input section of the switcher, and information related to each output section of the switcher, and issues the third control command including the information related to the input section and the information related to the output section to the control target included in the first control command with reference to the connection point table from the second control command, the switcher having its input sections and output sections controlled for connection on the basis of the information related to the input section and the information related to the output section included in the third control command.

76. (Previously Presented) The control apparatus as claimed in claim 73, wherein the identification information management means has an identification information management table including at least the control target and corresponding identification information, and second identification information provided for another one of the control targets and different from the identification information corresponding to an entry of identification information of the management table with respect to the control target appended to the first control command.

77. (Previously Presented) The control apparatus as claimed in claim 76, wherein the corresponding identification information is further registered to the identification information management table, and a file name is appended to the first control command registered thereto.

78. (Previously Presented) A control method for controlling a plurality of control targets, the method comprising:

a first step of receiving a first control command requesting permission of use of a control target from amongst said plurality of control targets, outputted from one of a plurality of upper control terminal means;

a second step of issuing identification information provided for each of the control targets to the one upper control terminal means which issued the first control command, on the basis of the first control command; and

a third step of, when a second control command indicating connection of the control target to which the identification information is appended is received, issuing a third control command indicating a connection instruction to the control target indicated by the second control command with reference to a connection management information table indicating connection information of the control target;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the controllers performing said control method.

79. (Previously Presented) The control method as claimed in claim 78, wherein the control target includes a switcher having a plurality of input sections and a plurality of output sections, and the second control command includes first identification information issued by the upper control terminal means with respect to other control targets connected to each input section of the switcher and second identification information issued by the upper control terminal means with respect to the output sections of the switcher.

80. (Previously Presented) The control method as claimed in claim 79, wherein the connection information management table includes information related to each input section of the switcher, the control target connected to each input section of the switcher, and information related to each output section of the switcher, and when the second control command is received, the third control command including the information related to the input section and the information related to the output section is issued from the control target corresponding to the identification information included in the second control command with reference to the connection information management table, the switcher further including a fourth step of controlling connection of the input sections and output sections of the switcher on the basis of the information related to the input section and the information related to the output section included in the third control command.

81. (Previously Presented) The control method as claimed in claim 78, wherein at the second step, second identification information is provided for another one of the control targets and different from the identification information corresponding to the entry of identification information of the management table so as to correspond to the control target appended to the first control command, from an identification information management table including at least the control target and corresponding identification information, and the second control command is issued to the one upper control terminal means.

82. (Previously Presented) The control method as claimed in claim 81, wherein the second identification information is further registered to the identification information management table, and the file name appended to the first control command is registered thereto.

83. (Previously Presented) A control apparatus for controlling a plurality of control targets, the apparatus comprising:

a plurality of upper control terminal means, each capable of issuing a first control command requesting permission of use of a control target from amongst said plurality of control targets;

management means having a control target management table including at least the control target and first identification information corresponding to each of the control targets, for issuing a second control command requesting permission of use of the control target including the first identification information from the management table on the basis of the first control command including the control target; and

control target control means for notifying of a result with respect to the permission of use of the control target on the basis of the second control command;

the management means setting a use permission flag with respect to the control target included in the management table on the basis of the result from the control target control means;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the controllers including the management means and control target control means.

84. (Previously Presented) The control apparatus as claimed in claim 83, wherein the management table further includes an entry to which second identification

information corresponding to the control target is registered when the control target cannot be uniquely identified by the first identification information alone, and when issuing to the control target control means the second control command with respect to the control target which cannot be uniquely identified by the first identification information alone, the management means. issues the second control command including the second identification information as well as the first identification information to the control target control means.

85. (Previously Presented) The control apparatus as claimed in claim 83, wherein when the control target control means has notified of a result indicating permission of use of the control target with respect to the second control command, the management means sets information indicating permission of use to the use permission flag of the management table and issues stream identification information corresponding to each of the control targets to the upper control terminal means.

86. (Previously Presented) The control apparatus as claimed in claim 85, wherein when the stream identification information is received from the management means, the upper control terminal means issues to the management means a control command with respect to the control target using the stream identification information.

87. (Previously Presented) The control apparatus as claimed in claim 84, wherein the control target includes a video server having a plurality of non-linearly accessible recording media and a plurality of input/output processing means for outputting, to the recording medium, data including video and/or audio data accessed and processed in a tune slot allocated to the recording medium or for accessing and reading the data recorded on the recording medium in the tune slot and then processing the data, and

the control target identified by the second identification information includes each input/output processing means and each of the recording media of the video server.

88. (Previously Presented) The control apparatus as claimed in claim 87, wherein the non-linearly accessible recording medium is a hard disk, and each recording medium identified by the second identification information is a hard disk drive.

89. (Previously Presented) The control apparatus as claimed in claim 83, wherein the control target includes a switcher having a plurality of input sections and a plurality of output sections for switching the input sections and output sections to output from one output section data inputted from one input section; the control target sets the use permission flag with reference to the management table and does not issue the second control command when the management means has received the first control command requesting the permission of use to the output section of the switcher.

90. (Previously Presented) A control method for controlling a plurality of control targets, the method comprising:

a first step of receiving a first control command from upper control terminal means requesting permission of use of a control target from amongst said plurality of control targets;

a second step of issuing a second control command requesting permission of use of the control target from a control target management table including at least the control target and first identification information corresponding to the control target;

a third step of receiving a result of permission of use of the control target with respect to the second control command; and

a fourth step of setting a use permission flag with respect to the control target included in the management table on the basis of the result of the permission of use;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the controllers performing the steps of said control method.

91. (Previously Presented) The control method as claimed in claim 90, wherein the management table further includes second identification information corresponding to the control target when the control target cannot be uniquely identified by the first identification information alone, and when issuing to the control target control means the second control command with respect to the control target which cannot be uniquely identified by the first identification information alone, the second control command including the second identification information as well as the first identification information is issued.

92. (Previously Presented) The control method as claimed in claim 90, wherein at the fourth step, when a result indicating permission of use of the control target is notified of, information indicating permission of use with respect to the control target included in the management table is set, the method further comprising a fifth step of issuing stream identification information provided for each of the control targets to the upper control terminal means which issued the first control command with respect to the control target for which the information indicating the permission of use is provided.

93. (Previously Presented) The control method as claimed in claim 90, further comprising a sixth step of retrieving the control target for which the control command should be issued, with reference to the management table, when the control command having stream identification information appended thereto is received.

94. (Previously Presented) The control method as claimed in claim 90, wherein the control target includes a video server having a plurality of non-linearly accessible recording media and a plurality of input/output processing means for outputting, to the recording medium, data including video and/or audio data accessed and processed in a tune slot allocated to the recording medium or for accessing and reading the data recorded on the recording medium in the time slot and then processing the data, and

the control target identified by second identification information includes each input/output processing means and each of the recording media of the video server.

95. (Previously Presented) The control method as claimed in claim 94, wherein the non-linearly accessible recording medium is a hard disk, and each recording medium identified by the second identification information is a hard disk drive.

96. (Previously Presented) The control method as claimed in claim 90, wherein the control target includes a switcher having a plurality of input sections and a plurality of output sections for switching the input sections and output sections to output from one output section data inputted from one input section, and at the fourth step, setting the use permission flag with reference to the management table without issuing the second control command at the third step, when the first control command requesting the permission of use to the output section of the switcher is received at the first step.

97. (Previously Presented) A control apparatus for controlling a plurality of control targets, the apparatus comprising:

a plurality of upper control terminal means, each capable of issuing a first control command requesting permission of use of a control target from amongst said plurality of control targets; and

management means to which the first control command including the file name of a file stored in one of the control targets is inputted, for finding control targets to which the file is to be outputted from the file name and selecting, from the control targets that are found, a second control target other than the control target;

wherein the upper control terminal means are connected through a network to the management means which are directly connected to said plurality of control targets.

98. (Previously Presented) The control apparatus as claimed in claim 97, wherein the management means issues a second control command indicating permission of use to the upper control terminal means which issued the first control command to the selected control target.

99. (Previously Presented) The control apparatus as claimed in claim 97, wherein when all the control targets found are used, the management means selects the control target having the lowest priority of the control targets having the priority of permission of use of the control target included in the first control command of the upper control terminal means which is lower than the priority included in the first control command, of the control commands that are found.

100. (Previously Presented) The control apparatus as claimed in claim 99, wherein the management means issues a third control command requesting open use of the control target to the upper control terminal means using the selected control target.

101. (Previously Presented) The control apparatus as claimed in claim 100, wherein when a fourth control command requesting open use of the control target based on the third control command is inputted, the management means issues a fifth control command indicating permission of use to the upper control terminal means which issued the first control command.

102. (Previously Presented) The control apparatus as claimed in claim 97, wherein the management means has the first control command inputted thereto, finds a storage device in which the file is stored from the file name included in the first control command, and

finds the control target connected to the storage device from the storage device that is found, thereby finding the control target to which the file is to be outputted.

103. (Previously Presented) A control method for controlling a plurality of control targets, the method comprising:

a first step of inputting a first control command from one of a plurality of upper control terminal means, requesting permission of use of a control target from amongst said plurality of control targets;

a second step of finding control targets to which a file is to be outputted from a file name included in the first control command; and

a third step of selecting, from the control targets that are found at the second step, a second control target other than the control target;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the controllers performing the steps of said control method.

104. (Previously Presented) The control method as claimed in claim 103, further comprising a fourth step of issuing a second control command indicating permission of use to the upper control terminal means which issued the first control command to the selected control target.

105. (Previously Presented) The control method as claimed in claim 103, further comprising a fifth step of, when all the control targets found at the second step are used at the third step, selecting the control target having the lowest priority of the control targets having the priority of permission of use of the control target included in the first control command of the upper control terminal means which is lower than the priority included in the first control command, of the control command that are found.

106. (Previously Presented) The control method as claimed in claim 105, further comprising a sixth step of issuing a third control command requesting open use of the control target to the upper control terminal means using the control target selected at the fifth step.

107. (Previously Presented) The control method as claimed in claim 106, further comprising a seventh step of, when a fourth control command requesting open use of the control target based on the third control command is inputted, issuing a fifth control command indicating permission of use to the upper control terminal means which issued the first control command.

108. (Previously Presented) The control method as claimed in claim 103, wherein at the second step, a storage device in which the file is stored is found from the file name included in the first control command, and the control target connected to the storage device is found from the storage device, thereby finding the control target to which the file is to be outputted.

109. (Previously Presented) A control apparatus for controlling a plurality of control targets, the apparatus comprising:

a plurality of upper control terminal means, each capable of issuing a first control command requesting permission of use of a control target from amongst said plurality of control targets; and

management means to which the first control command including the file name of a file stored in one of the control targets is inputted, for finding the control targets to which the file is to be outputted from the file name, and selecting the control target for which the upper control terminal means having issued the first control command issued a reserved use command with respect to the control target, of the control targets that are found;

wherein the upper control terminal means are connected through a network to the management means which are directly connected to said plurality of control targets.

110. (Previously Presented) The control apparatus as claimed in claim 109, wherein the management means issues a second control command indicating permission of use to the upper control terminal means which issued the first control command to the selected control target.

111. (Previously Presented) The control apparatus as claimed in claim 109, wherein when the upper control terminal means which issued the first control command has not issued the reservation command to the control target of the control targets that are found, the management means selects the control target other than the control target for which another one of the upper control terminal means issued the reservation command, of the control targets that are found.

112. (Previously Presented) The control apparatus as claimed in claim 111, wherein the management means issues a second control command indicating permission of use to the upper control terminal means which issued the first control command to the selected control target.

113. (Previously Presented) The control apparatus as claimed in claim 109, wherein the management means finds a storage device in which the file is stored from the file name included in the first control command, and finds the control target connected to the storage device from the storage device, thereby finding the control target to which the file is to be outputted.

114. (Previously Presented) A control method for controlling a plurality of control targets, the method comprising:

a first step of inputting a first control command from one of a plurality of upper control terminal means, requesting permission of use of a control target from amongst said plurality of control targets;

a second step of finding the control targets to which a file is to be outputted from a file name included in the first control command; and

a third step of selecting the control target for which the upper control terminal means having issued the first control command issued a reserved use command with respect to the control target, of the control targets that are found at the second step;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the controllers performing the steps of said control method.

115. (Previously Presented) The control method as claimed in claim 114, further comprising a fourth step of issuing a second control command indicating permission of use to the upper control terminal means which issued the first control command to the control target selected at the third step.

116. (Previously Presented) The control method as claimed in claim 114, further comprising a fifth step of, when the upper control terminal means which issued the first control command has not issued the reservation command to the control target of the control targets that are found at the second step, selecting the control target other than the control target for which another one of the upper control terminal means issued the reservation command, of the control targets that are found.

117. (Previously Presented) The control method as claimed in claim 116, further comprising a sixth step of issuing a second control command indicating permission of use to the upper control terminal means which issued the first control command to the control target selected at the fifth step.

118. (Previously Presented) The control method as claimed in claim 114, wherein at the second step, a storage device in which the file is stored is found from the file name included in the first control command, and the control target connected to the storage device is found from the storage device.

119. (Previously Presented) A control apparatus for controlling a plurality of control targets, the apparatus comprising:

a plurality of upper control terminal means, each capable issuing a first control command requesting permission of use of a control target from amongst said plurality of control targets; and

management means for, when the first control command including the file name of a file stored in one of the control targets is inputted, finding the control targets to which the file is to be outputted from the file name and selecting the control target other than the control target in an error and warning state, of the control targets that are found;

wherein the upper control terminal means are connected through a network to the management means which are directly connected to said plurality of control targets.

120. (Previously Presented) The control apparatus as claimed in claim 119, wherein the management means issues a second control command indicating permission of use to the upper control terminal means which issued the first control command to the selected control target.

121. (Previously Presented) The control apparatus as claimed in claim 120, wherein when there is no control target other than the control target in the error and warning

state of the control targets that are found, the management means selects the control target in the warning state alone.

122. (Previously Presented) The control apparatus as claimed in claim 121, wherein the management means issues a second control command indicating permission of use to the upper control terminal means which issued the first control command to the selected control target.

123. (Previously Presented) The control apparatus as claimed in claim 119, wherein the management means finds a storage device in which the file is stored from the file name included in the first control command, and finds the control target connected to the storage device from the storage device.

124. (Previously Presented) A control method for controlling a plurality of control targets, the

method comprising:

a first step of inputting a first control command from one of a plurality of upper control terminal means, requesting permission of use of a control target from amongst said plurality of control targets;

a second step of finding the control targets to which a file is to be outputted from a file name included in the first control command; and

a third step of selecting the control target other than the control target in an error and warning state, of the control targets that are found at the second step;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the controllers performing the steps of said control method.

125. (Previously Presented) The control method as claimed in claim 124, further comprising a fourth step of issuing a second control command indicating permission of use to the upper control terminal means which issued the first control command to the control target selected at the third step.

126. (Previously Presented) The control method as claimed in claim 124, further comprising a fifth step of, when at the third step there is no control target other than the control target in the error and warning state of the control targets that are found, selecting the control target in the warning state alone.

127. (Previously Presented) The control method as claimed in claim 125, further comprising a fifth step of issuing a second control command indicating permission of use to the upper control terminal means which issued the first control command to the control target selected at the fourth step.

128. (Previously Presented) The control method as claimed in claim 124, wherein at the second step, a storage device in which the file is stored is found from the file name included in the first control command, and the control target connected to the storage device is found from the storage device that is found.

129. (Previously Presented) A control apparatus for controlling a plurality of control targets, the apparatus comprising:

a plurality of upper control terminal means, each capable of issuing a first control command requesting permission of use of a control target from amongst said plurality of control targets; and

management means to which the first control command including the file name of a file stored in one of the control targets is inputted, for finding the control targets to which the file is to be outputted from the file name, and selecting the control target which is not in an error state and which is reserved by a reservation command issued by the upper control terminal means having issued the first control command or which is not reserved as a reservation command is not issued, and which is in a non-use state or which has low priority of permission of use, from the control targets that are found;

wherein the upper control terminal means are connected through a network to the management means which are directly connected to said plurality of control targets.

130. (Previously Presented) The control apparatus as claimed in claim 129, wherein the management means issues a second control command indicating permission of use to the upper control terminal means which issued the first control command to the control targets that are found.

131. (Previously Presented) The control apparatus as claimed in claim 129, wherein when there are a plurality control targets that are selected, the management means selects the control target in a non-use state from the selected control targets.

132. (Previously Presented) The control apparatus as claimed in claim 131, wherein the management means issues a second control command indicating permission of use to the upper control terminal means which issued the first control command to the selected control target.

133. (Previously Presented) The control apparatus as claimed in claim 132, wherein when there are a plurality of control targets that are selected, the management means selects the control target which is not in a warning state from the selected control targets.

134. (Previously Presented) The control apparatus as claimed in claim 133, wherein the management means issues a second control command indicating permission of use to the upper control terminal means which issued the first control command to the selected control target.

135. (Previously Presented) The control apparatus as claimed in claim 133, wherein when there are a plurality of control targets that are selected, the management means selects the control target in a reserved state alone to which the first control command is issued.

136. (Previously Presented) A control method for controlling a plurality of control targets, the method comprising:

a first step of receiving a first control command from one of a plurality of upper control terminal means, requesting permission of use of a control target from amongst said plurality of control targets;

a second step of inputting the first control command including the file name of a file stored in one of the control targets, and outputting the file from the file name; and

a third step of selecting the control target which is not in an error state and which is reserved by a reservation command issued by the upper control terminal means having issued the first control command or which is not reserved as a reservation command is not issued, and which is in a non-use state or which has low priority of permission of use, from the control targets that are found at the second step;

wherein the upper control terminal means are connected through a network to controllers which are directly connected to said plurality of control targets; the controllers performing the steps of said control method.

137. (Previously Presented) The control method as claimed in claim 136, further comprising a fourth step of issuing a second control command indicating permission of use to the upper control terminal means which issued the first control command to the control targets that are found.

138. (Previously Presented) The control method as claimed in claim 136, further comprising a fifth step of, when at the third step there are a plurality control targets that are selected, selecting the control target in a non-use state from the selected control targets.

139. (Previously Presented) The control method as claimed in claim 138, further comprising a sixth step of issuing a second control command indicating permission of use to the upper control terminal means which issued the first control command to the control target selected at the fifth step.

140. (Previously Presented) The control method as claimed in claim 138, further comprising a seventh step of, when at the fifth step there are a plurality of control targets that are selected, selecting the control target which is not in a warning state from the selected control targets.

141. (Previously Presented) The control method as claimed in claim 140, further comprising an eighth step of issuing a second control command indicating permission of use to the upper control terminal means which issued the first control command to the control target selected at the seventh step.

142. (Previously Presented) The control method as claimed in claim 140, further comprising a ninth step of, when at the seventh step there are a plurality of control targets that are selected, selecting the control target in a reserved state alone to which the first control command is issued.

143. (Previously Presented) The control method as claimed in claim 142, further comprising a tenth step of issuing a second control command indicating permission of use

to the upper control terminal means which issued the first control command to the control target selected at the seventh step.

APPENDIX II

EVIDENCE

None

APPENDIX III

RELATED PROCEEDINGS

None